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Attorney's Docket No.: 501-088001 / J1-101DP2PCT-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Tasuku Honjo et al.
Serial No. : 09/966,880
Filed : September 28, 2001
Title : NOVEL CYTIDINE DEAMINASE

Art Unit : 1652
Examiner : Sheridan L. Swope

#14
M.G.J
3/18/03

Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO RESTRICTION REQUIREMENT

In response to the Restriction Requirement dated January 24, 2003, applicants elect the invention of Group II, drawn to DNA encoding a human cytidine deaminase and vectors and host cells containing the DNA. The election is made with traverse.

The Examiner has divided the claims into nine separate restriction groups. Applicants respectfully traverse the nine-way restriction, for the reasons provided below.

Applicants have isolated nucleic acids encoding a novel cytidine deaminase protein, termed Activation-Induced cytidine Deaminase (AID). As detailed in the specification, the human and mouse AID amino acid sequences share extremely high overall homology (page 70, lines 16-20; and Figure 22). In addition, all amino acid residues contained in the cytidine and deoxycytidilate deaminase zinc-binding region are conserved between the human and mouse AID polypeptides.

In light of the extremely high relatedness between the human and murine AID sequences, applicants respectfully submit that the subject matter of Group I should be examined together with that of elected Group II. The Examiner has divided the claims on the basis of their being directed to nucleic acids encoding human (Group II) or murine (Group I) cytidine deaminase polypeptides. Because of the high relatedness between the AID sequences, the issues raised during the course of prosecution of the human and murine sequences are expected to be similar

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and examination of both sequences would therefore not be unduly burdensome. Accordingly, prosecution will be facilitated by the simultaneous examination of nucleic acids encoding human and mouse AID polypeptides.

In addition to Groups I and II (nucleic acids), each of Groups III and IV (proteins), Groups V and VI (antibodies), and Groups VII and VIII (methods of identification) have also been divided into separate groups based upon the recitation of a human or murine AID sequence. For the same reasons presented herein for Groups I and II, the simultaneous examination of Groups III and IV, Groups V and VI, and Groups VII and VIII would not be unduly burdensome. Accordingly, applicants request that the Examiner withdraw the requirement for restriction between these several groups.

In summary, applicants submit that a five-way restriction, as follows, is appropriate for the pending claims: (1) Groups I and II; (2) Groups III and IV; (3) Groups V and VI; (4) Groups VII and VIII; and (5) Group IX.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 06501-088001.

Respectfully submitted,

Date: February 24, 2003

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